

# Paris Session 2022



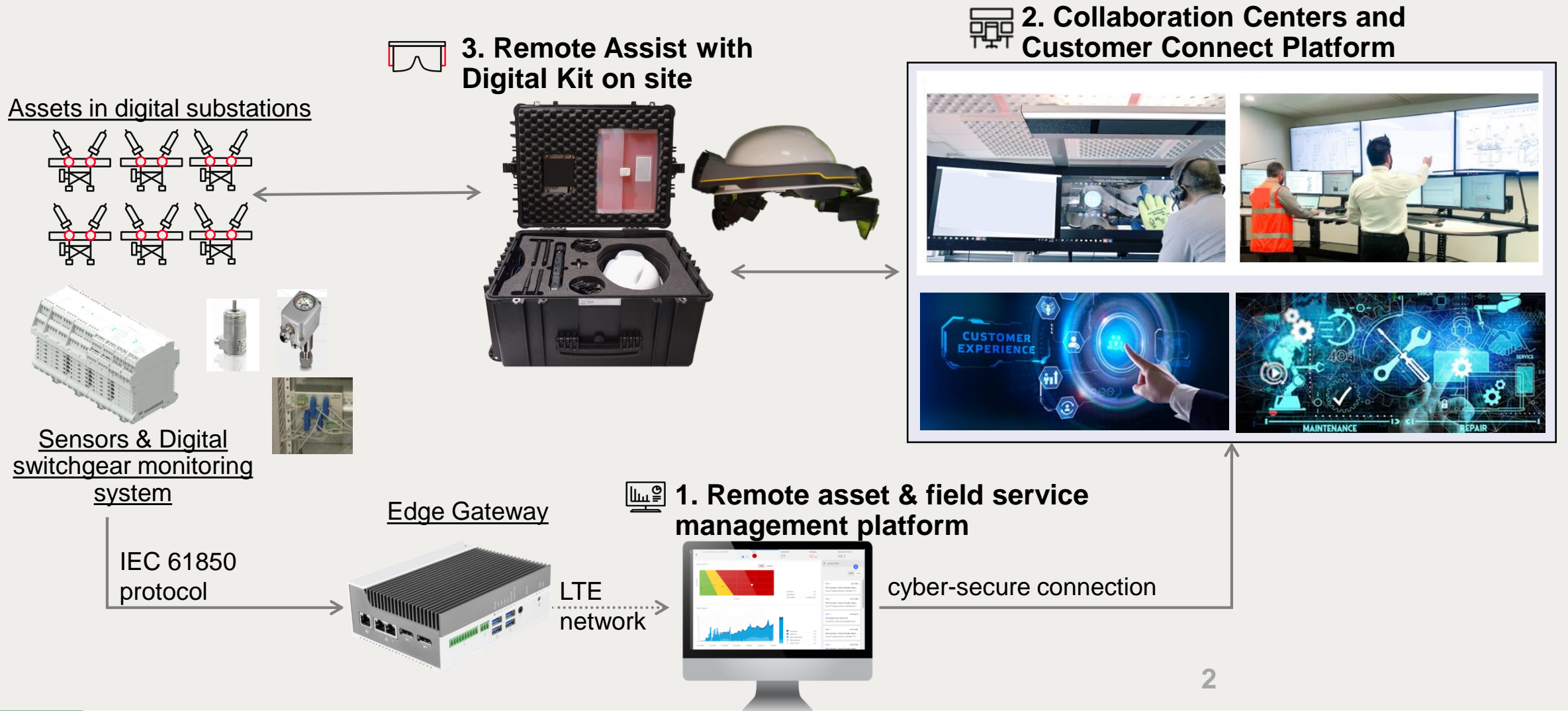
## Remote asset management, Digital Kit and Collaboration Center

**B3 – PS3.3:** What are the emerging requirements for asset performance management systems? What are the preferred hardware and software architectures? Are the planned benefits already recognizable regarding cost reduction for operation and maintenance and increase of reliability?

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# The 3 pillars of the digital collaboration architecture



# The key benefits and requirements for asset performance management



## Digital Kit

(VR helmet & data connection)

### Benefits & requirements

- **Reduction of cost** e.g., for travelling, analysis periods, training and reduced downtime
- All remote services support **working safely** and **eliminate risk** from maintenance staff

### Technologies

- **XMReality**. No extra hardware is required beside a smartphone or tablet. Via the phone camera, microphone and screen information and work recommendations can be exchanged.
- Alternative is the Digital Kit based on **Hololense technology**. MS Teams to share documents and other content.



## Asset management platform

(software used by asset operating company)

### Benefits & requirements

- **Increased availability of assets** and enhanced performance due to continuous access to experts and engineers
- **Prioritization, planning and optimization** of the maintenance cycle
- Enable **predictive scheduling for maintenance** and **replacement** of critical assets
- Designed to **provide health and performance insights to prevent critical asset failures** while optimizing asset lifecycle costs
- **Rapid restoration** of operating conditions in the event of a fault
- Leverages **online and offline data** to drive **intelligent asset management**

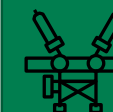


## Collaboration Centers & Customer Connect

(Manufacturer's helpdesk)

### Benefits & requirements

- **Fast and short resolution** of any issue, important in the times of complex and multi-discipline problems
- **Increase of first-time fix rate** (publications show that this first-time fix rate is typically not higher than 26%)



Digital SWG



Gateway



Cloud



Collaboration Center

True value comes from the combination of the three pillars (examples Italy, Philippines, Japan, etc.)



# Installation & Commissioning: digital substation at a hydro powerplant



Successful remote installation & commissioning of a digital substation using the Digital Kit, the asset management platform & the Collaboration Center

Q: What are the emerging requirements for asset performance management systems?

A: Integration of field data into asset management systems connected to remote assistance available 24/7

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Q: What are the preferred hardware and software architectures?

A: The strong value comes from the combination of available software and hardware solutions with the human expertise

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Q: Are the planned benefits already recognizable regarding cost reduction for operation and maintenance and increase of reliability?

A: During the pandemic we were able to continue our global operations thanks to the presented technology, including installation & commissioning, troubleshooting & training.

Increased health & safety with full assistance of the asset operator utilizing the presented technology